



**[4910-13-P]**

**DEPARTMENT OF TRANSPORTATION**

**Federal Aviation Administration**

**14 CFR Part 39**

**[Docket No. FAA-2008-0618; Directorate Identifier 2007-NM-355-AD]**

**RIN 2120-AA64**

**Airworthiness Directives; The Boeing Company Airplanes**

**AGENCY:** Federal Aviation Administration (FAA), DOT.

**ACTION:** Supplemental notice of proposed rulemaking (NPRM); reopening of comment period.

**SUMMARY:** We are revising an earlier proposed airworthiness directive (AD) for all The Boeing Company Model 777-200, -200LR, -300, and -300ER series airplanes. That supplemental notice of proposed rulemaking (SNPRM) proposed to require revising the maintenance program to incorporate a revision to the Airworthiness Limitations Section of the maintenance planning data (MPD) document. That SNPRM was prompted by reports of two in-service occurrences on Model 737-400 airplanes of total loss of boost pump pressure of the fuel feed system, followed by loss of fuel system suction feed capability on one engine, and in-flight shutdown of the engine. This action revises that SNPRM by adding Model 777F series airplanes to the applicability. We are proposing this AD to detect and correct failure of the engine fuel suction feed of the fuel system, which, in the event of total loss of the fuel boost pumps, could result in dual engine flameout, inability to restart the engines, and consequent forced landing of the airplane. Since this action imposes an additional burden over that proposed in the previous SNPRM, we are reopening the comment period to allow the public the chance to comment on this proposed change.

**DATES:** We must receive comments on this supplemental NPRM by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

**ADDRESSES:** You may send comments, using the procedures found in 14 CFR 11.43 and 11.45, by any of the following methods:

- Federal eRulemaking Portal: Go to <http://www.regulations.gov>. Follow the instructions for submitting comments.
- Fax: 202-493-2251.
- Mail: U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590.
- Hand Delivery: U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590, between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

For service information identified in this proposed AD, contact Boeing Commercial Airplanes, Attention: Data & Services Management, P. O. Box 3707, MC 2H-65, Seattle, WA 98124-2207; telephone 206-544-5000, extension 1; fax 206-766-5680; Internet <https://www.myboeingfleet.com>. You may review copies of the referenced service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, Washington. For information on the availability of this material at the FAA, call 425-227-1221.

### **Examining the AD Docket**

You may examine the AD docket on the Internet at <http://www.regulations.gov>; or in person at the Docket Management Facility between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this proposed AD, the regulatory evaluation, any comments received, and other information. The street address for the Docket Office (phone: 800-647-5527) is in the ADDRESSES section. Comments will be available in the AD docket shortly after receipt.

**FOR FURTHER INFORMATION CONTACT:** Sue Lucier, Aerospace Engineer,  
Propulsion Branch, ANM-140S, 1601 Lind Avenue SW., Renton, Washington  
98057-3356; phone: 425-917-6438; fax: 425-917-6590; email: [suzanne.lucier@faa.gov](mailto:suzanne.lucier@faa.gov).

**SUPPLEMENTARY INFORMATION:**

**Comments Invited**

We invite you to send any written relevant data, views, or arguments about this proposed AD. Send your comments to an address listed under the ADDRESSES section. Include “Docket No. FAA-2008-0618; Directorate Identifier 2007-NM-355-AD” at the beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of this proposed AD. We will consider all comments received by the closing date and may amend this proposed AD because of those comments.

We will post all comments we receive, without change, to <http://www.regulations.gov>, including any personal information you provide. We will also post a report summarizing each substantive verbal contact we receive about this proposed AD.

**Discussion**

We issued a supplemental NPRM (SNPRM) to amend 14 CFR part 39 to include an AD that would apply to all The Boeing Company Model 777-200, -200LR, -300, and -300ER series airplanes. The earlier SNPRM published in the Federal Register on March 7, 2013 (78 FR 14722). The earlier SNPRM proposed to require revising the maintenance program to incorporate a revision to the Airworthiness Limitations Section of the MPD document.

### **Actions Since Earlier SNPRM (78 FR 14722, March 7, 2013) was Issued**

Since we issued the earlier SNPRM (78 FR 14722, March 7, 2013), we have determined that Model 777F series airplanes are also affected by the identified unsafe condition and must be included in the applicability.

### **Comment**

We gave the public the opportunity to comment on the earlier SNPRM (78 FR 14722, March 7, 2013). The following presents the comment received on the earlier SNPRM and the FAA's response to that comment.

### **Request to Add Airplanes**

FedEx asked that Model 777F series airplanes be added to the applicability identified in paragraph (c) of the earlier SNPRM (78 FR 14722, March 7, 2013), if the intent is to include all Model 777 series airplanes.

We agree with the commenter to include all Model 777 series airplanes for the reason provided previously. We have changed paragraph (c) of this second SNPRM to add Model 777F series airplanes.

### **FAA's Determination**

We are proposing this second SNPRM because we evaluated all the relevant information and determined the unsafe condition described previously is likely to exist or develop in other products of the same type design. The change described above expands the scope of the earlier SNPRM (78 FR 14722, March 7, 2013). As a result, we have determined that it is necessary to reopen the comment period to provide additional opportunity for the public to comment on this second SNPRM.

### **Proposed Requirements of the Second SNPRM**

This second SNPRM revises the earlier SNPRM (78 FR 14722, March 7, 2013), by proposing to add airplanes to the applicability.

## Costs of Compliance

We estimate that this proposed AD would affect 676 airplanes of U.S. registry.

We estimate the following costs to comply with this proposed AD:

### Estimated costs

Action	Labor cost	Cost per product	Cost on U.S. operators
Maintenance Program Revision	1 work-hour X \$85 per hour = \$85	\$85 per test	\$57,460, per test

We have received no definitive data that would enable us to provide a cost estimate for the on-condition actions or the optional terminating action specified in this AD.

## Authority for this Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. "Subtitle VII: Aviation Programs" describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701: "General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This proposed regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

## Regulatory Findings

We determined that this proposed AD would not have federalism implications under Executive Order 13132. This proposed AD would not have a substantial direct

effect on the States, on the relationship between the national Government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify this proposed regulation:

- (1) Is not a “significant regulatory action” under Executive Order 12866,
- (2) Is not a “significant rule” under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979),
- (3) Will not affect intrastate aviation in Alaska, and
- (4) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

#### **List of Subjects in 14 CFR Part 39**

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

#### **The Proposed Amendment**

Accordingly, under the authority delegated to me by the Administrator, the FAA proposes to amend 14 CFR part 39 as follows:

#### **PART 39 - AIRWORTHINESS DIRECTIVES**

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

#### **§ 39.13 [Amended]**

2. The FAA amends § 39.13 by adding the following new airworthiness directive (AD):

**The Boeing Company:** Docket No. FAA-2008-0618; Directorate Identifier 2007-NM-355-AD.

#### **(a) Comments Due Date**

We must receive comments by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

**(b) Affected ADs**

None.

**(c) Applicability**

This AD applies to all The Boeing Company Model 777-200, -200LR, -300, -300ER, and 777F series airplanes, certificated in any category.

**(d) Subject**

Joint Aircraft System Component (JASC)/Air Transport Association (ATA) of America Code 2800, Aircraft Fuel System.

**(e) Unsafe Condition**

This AD was prompted by reports of two in-service occurrences on Model 737-400 airplanes of total loss of boost pump pressure of the fuel feed system, followed by loss of fuel system suction feed capability on one engine, and in-flight shutdown of the engine. We are issuing this AD to detect and correct failure of the engine fuel suction feed of the fuel system, which, in the event of total loss of the fuel boost pumps, could result in dual engine flameout, inability to restart the engines, and consequent forced landing of the airplane.

**(f) Compliance**

Comply with this AD within the compliance times specified, unless already done.

**(g) Maintenance Program Revision**

Within 90 days after the effective date of this AD: Revise the maintenance program to incorporate the Airworthiness Limitation (AWL) identified in Appendix 1 of this AD. The initial compliance time for accomplishing AWL No. AWL-28-101, Engine Fuel Suction Feed Operational Test, is within 7,500 flight hours or 3 years after the effective date of this AD, whichever is first.

**(h) No Alternative Actions, Intervals, and/or Critical Design Configuration Control Limitations (CDCCLs)**

After accomplishing the revision required by paragraph (g) of this AD, no alternative actions (e.g., tests), intervals, or CDCCLs may be used unless the actions, intervals, or CDCCLs are approved as an alternative method of compliance (AMOC) in accordance with the procedures specified in paragraph (j) of this AD.

**(i) Credit for Incorporating Previous Maintenance Program Revision**

This paragraph provides credit for the actions required by paragraph (g) of this AD, if those actions were performed before the effective date of this AD using AWL No. 28-AWL-101, Engine Fuel Suction Feed Operational Test, of Section D.2., AWLS – Fuel Systems, of Section 9, Airworthiness Limitations (AWLs) and Certification Maintenance Requirements (CMRs), D622W001-9, Revision February 2012, of the Boeing 777 Maintenance Planning Data (MPD) Document, provided the revised “interval” specified in Appendix 1 of this AD is incorporated into the existing maintenance program within 90 days after the effective date of this AD.

**(j) Alternative Methods of Compliance (AMOCs)**

(1) The Manager, Seattle Aircraft Certification Office (ACO), FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the manager of the ACO, send it to the attention of the person identified in the Related Information section of this AD. Information may be emailed to:

[9-ANM-Seattle-ACO-AMOC-Requests@faa.gov](mailto:9-ANM-Seattle-ACO-AMOC-Requests@faa.gov).

(2) Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.



**(k) Related Information**

(1) For more information about this AD, contact Sue Lucier, Aerospace Engineer, Propulsion Branch, ANM-140S, 1601 Lind Avenue SW., Renton, Washington 98057-3356; phone: 425-917-6438; fax: 425-917-6590; email: [suzanne.lucier@faa.gov](mailto:suzanne.lucier@faa.gov).

(2) For service information identified in this AD, contact Boeing Commercial Airplanes, Attention: Data & Services Management, P. O. Box 3707, MC 2H-65, Seattle, WA 98124-2207; telephone 206-544-5000, extension 1; fax 206-766-5680; Internet <https://www.myboeingfleet.com>. You may review copies of the referenced service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, Washington. For information on the availability of this material at the FAA, call 425-227-1221.

### Appendix 1.

AWL NUMBE R	TASK	INTERVAL	APPLICABILITY	DESCRIPTION
28- AWL- 101	ALI	7,500 FH or 3 years, whichever is first	ALL	<p>Engine Fuel Suction Feed Operational Test</p> <p>An Engine Fuel Suction Feed Operational Test must be accomplished successfully on each engine individually. This test is required in order to protect against engine flameout during suction feed operations, and must meet the following requirements (refer to Boeing AMM 28-22-00):</p> <p>Fuel Tank Quantity Limitations:</p> <p>Engine No. 1</p> <ul style="list-style-type: none"> <li>a. The Center Tank Fuel Quantity must not exceed 5,000 lbs (2,270 kg).</li> <li>b. The Main Tank No. 1 Fuel Quantity must be between 1,400 lbs – 1,600 lbs (600 kg – 800 kg).</li> </ul> <p>NOTE: Excess fuel can be transferred to Main Tank No. 2.</p> <p>Engine No. 2</p> <ul style="list-style-type: none"> <li>a. The Center Tank Fuel Quantity must not exceed 5,000 lbs (2,270 kg).</li> <li>b. The Main Tank No. 2 Fuel Quantity must be between 1,400 lbs – 1,600 lbs (600 kg – 800 kg).</li> </ul> <p>NOTE: Excess fuel can be transferred to Main Tank No. 1.</p>

AWL NUMBE R	TASK	INTERVAL	APPLICABILITY	DESCRIPTION
				<p>Test Procedural Limitations:</p> <ol style="list-style-type: none"> <li>1. The Fuel Cross-Feed Valve must be CLOSED.</li> <li>2. The APU Selector Switch must be OFF.</li> <li>3. Idle Engine Warm-up time of minimum two minutes with Boost Pump ON.</li> <li>4. Idle Engine Suction Feed (Boost Pump OFF) operation for a minimum of five minutes.</li> </ol> <p>NOTE: APU may be used to start the engines provided the Fuel Tank Quantity and Test Procedural Limitations are met.</p> <p>The test is considered a success if engine operation is maintained during the five-minute period and engine parameters (N1, N2, and Fuel Flow) do not decay relative to those observed with Boost Pump ON.</p> <p>A suction feed system that fails the operational test must be repaired or maintained, and successfully pass the Engine Suction Feed Operational Test prior to further flight.</p>

**Directorate Identifier 2007-NM-355-AD**

Issued in Renton, Washington, on July 23, 2013.

Stephen P. Boyd,  
Acting Manager,  
Transport Airplane Directorate,  
Aircraft Certification Service.

[FR Doc. 2013-18237 Filed 07/29/2013 at 8:45 am; Publication Date: 07/30/2013]